ELSEVIER

Journal of Electron Spectroscopy and Related Phenomena 88-91 (1998) 1037–1041

JOURNAL OF ELECTRON SPECTROSCOPY and Related Phenomena

Author index

Abduaini, A., 849, 885
Abukawa, T., 533, 539, 609
Achiba, Y., 843
Aeschlimann, M., 179
Ågren, H., 29
Aida, M., 997
Aita, O., 671
Aiura, Y., 695
Akinaga, H., 225
Akiyama, S., 1027
Amano, H., 787
An, K.-S, 225
An, K.S., 701, 733
Anazawa, T., 585
Antonov, V., 957
Aoki, M., 849, 881, 885, 905, 933, 997
Aoki, Y., 419
Aonuma, S., 939
Arciszewska, M., 327
Arimoto, O., 297
Aristov, V. Y., 613
Arita, M., 391
Ashida, K., 281
Ashima, H., 897
Azuma, T., 83, 87
Azuma, Y., 881

Baba, Y., 467, 603
Babushkina, S.N., 977
Bando, H., 695
Bartkowski, S., 441
Bauer, M., 179
Becker, T., 1015
Belkhou, R., 613
Berakdar, J., 59
Bizau, J.-M., 41
Blanchard, G., 951
Bodnar, D.M., 963
Bondarenko, T.N., 267, 385
Borghi, A., 741
Borisenko, S.V., 385
Bradshaw, A.M., 19
Brause, M., 725, 757
Brillo, J., 809
Bullock, E.L., 539
Bureau, C., 657
Burgermeister, R., 179
Bystrova, S.G., 977

Cai, Y.Q., 219
Canney, S., 247
Carrère, M., 613
Casalis, L., 991
Caudano, R., 951
Cavell, R.G., 71
Chiba, H., 53, 1031
Chin, W.S., 91, 97
Chong, D.P., 657
Cricenti, A., 711
Cubaynes, D., 41
Cubiotti, G., 957

Daimon, H., 213, 287, 315, 419, 473, 489
de Castro, S.G.C., 429
de Siervo, A., 429
Deev, A.N., 551, 557
Delhalle, J., 855
Delin, A., 303
di Bona, A., 741
Diehl, S., 41
Domashevskaya, E.P., 479, 963, 969
Domen, K., 1003
Doneux, C., 855
Dorn, A., 59
Drube, W., 241, 683
Dubrovskii, O.I., 479
Duwez, A.-S., 855

Eberhardt, W., 35
Edamoto, K., 801, 805
Ederer, D.L., 441
Elliott, A., 59
Enta, Y., 747
Eriksson, O., 303
Esaka, F., 763, 817
Escher, M., 1009
Etori, H., 905
Eustatiu, I.G., 77

Fecher, G.H., 185, 983, 1009
Fedorova, I.S., 509
Francis, J.T., 77
Freund, H.-J., 809
Frömter, R., 983
Fujii, J., 201
Fujii, K., 837
Fujii, Y., 297
Fujikawa, M., 213, 473, 489
Fujikawa, T., 523, 527, 649
Fujimori, A., 207, 225, 303, 308, 315, 411, 419, 939
Fujimori, S., 395, 625
Fujimori, S.-I., 353, 631
Fujimoto, Y., 643
Fujioka, H., 603
Fujisawa, H., 461
Fujiwara, S., 297
Fukawa, T., 281
Fukuda, Y., 503, 609
Fukunaga, T., 801
Fukutani, H., 717
Fukutani, K., 597
Funnemann, D., 983, 1015
Furuhashi, M., 143
Furuhata, T., 213, 489
Furuta, A., 425
Furuya, K., 763, 817

Galakhov, V.R., 441
Galtayries, A., 951
Ganteför, G., 35
Gazzadi, G.C., 741
Gel'mukhanov, F., 29
Ghijsen, J., 321, 327, 333
Golacki, Z., 327
Goto, T., 533
Grebennikov, V.I., 551
Gregoire, C., 855
Gregoratti, L., 991

Grehk, T.M., 241, 683
Grimm, B., 1015
Grzelakowski, K., 983
Gundlach, H., 983
Gunji, Y., 717
Guy, D.E., 551
Guziewiz, E., 321, 327
Günther, S., 991

Haga, Y., 353
Hanano, T., 533
Hansen, J.E., 83, 241
Hanyu, T., 419
Harada, H., 281, 308, 315
Harada, M., 897
Harada, T., 361
Harada, Y., 293, 837, 849, 881, 885, 913, 933
Haruyama, Y., 695
Hasegawa, M., 461
Hasegawa, S., 875, 891, 913
Hasegawa, T., 287
Hashimoto, T., 919
Hatada, K., 649
Hatano, M., 347, 637
Hatsui, T., 235, 405
Hayaishi, T., 1031
Hayashi, K., 787
Hedin, L., 649
Heinzmann, U., 1009
Hergenhahn, U., 19
Hino, S., 843
Hirose, K., 767
Hitchcock, A.P., 71, 77
Honda, T., 395
Hongo, S., 619
Hori, T., 747
Horie, T., 747
Horiuchi, H., 793
Hotzel, A., 577
Hövel, H., 1015
Huang, H.H., 91, 97
Huang, W., 91
Huff, W.R.A., 533, 609
Hwang, C.C., 701, 733
Håkansson, C., 711

Ichihara, S., 1003
Ichikawa, K., 671
Iga, F., 303, 391
Iizumi, K., 457
Ikeda, K., 137
Ikenaga, E., 831
Imada, S., 191, 195, 281, 308, 315, 361, 419
Imai, M., 83, 87
Imamura, I., 997
Imamura, M., 545, 763, 817
Inokuchi, H., 891
Inoue, A., 415
Inoue, H., 125
Ishii, H., 308, 315, 415, 419, 517, 545, 821, 875, 939, 1021
Itai, Y., 773
Ito, E., 875
Iwaki, M., 945
Iwasaki, K., 843
Iwasaki, T., 281, 308, 315, 361, 419, 939
Iwasawa, Y., 773

Jo, T., 293, 425
Johansson, L.S.O., 539
Johnson, R.L., 321, 327, 613
Jürgensen, A., 71

Kadar, I., 83
Kadikova, A.H., 557
Kaibara, M., 945
Kakizaki, A., 163, 191, 201, 207, 225, 229, 701, 733
Kamada, M., 219, 297, 665, 689, 997
Kamakura, N., 207, 225, 701
Kanai, Y., 83, 87
Kaneda, G., 609
Kanomata, T., 361
Karbovskii, V.L., 973
Kasai, M., 473
Kasashima, M., 191
Kashkarov, V.M., 963, 969
Kasuga, M., 933
Kasuya, A., 897
Kato, H., 695, 747
Kato, R., 939
Katoh, K., 308, 391
Katsumi, T., 671
Kaurila, T., 399
Kawai, J., 787
Kawai, M., 665, 997, 1003
Kawai, T., 489
Kawanaka, H., 303
Kawasaki, M., 767
Kawatsura, K., 83, 87
Kawauchi, T., 597
Kempgens, B., 19
Kempter, V., 725, 757
Kennedy, E.T., 41
Kera, S., 849, 881, 885, 933
Kheifets, A., 247
Kholzakov, A.V., 343, 453
Kikuchi, K., 843
Kikuchi, T., 763, 817
Kikuma, J., 919
Kim, H.J., 613
Kim, J.S., 733
Kimura, A., 191, 195, 201, 207, 225, 229, 361, 419, 701, 733
Kimura, K., 125, 131, 137
Kimura, M., 533
Kimura, S., 369, 377
Kimura, T., 308, 419
Kinoshita, I., 585
Kinoshita, T., 369, 377
Kirschner, J., 983
Kishimoto, N., 143
Kishio, K., 495
Kiskinova, M., 991
Kitahama, K., 489
Kitajima, Y., 787
Kitazawa, K., 287
Kitazawa, S., 83, 87
Kivimäki, A., 19
Kleiman, C.G., 429, 435
Kleineberg, U., 1009
Knoesel, E., 577
Kobayashi, K., 303, 411
Kodolov, V.I., 977
Kolmakov, A., 991
Koma, A., 457
Komaki, K., 83, 87
Komatsubara, T., 353, 631
Konishi, T., 411, 919
Konishia, T., 303
Kono, S., 533, 539, 609
Kormilets, V.I., 485
Korochentzev, V.V., 119
Kosugi, N., 235, 405
Kotani, A., 255, 261, 369, 377
Kotsugi, M., 287, 473, 489
Kotsugi, T., 293
Kovac, J., 991
Kowalski, B.J., 321, 327
Koyama, M., 333
Köppe, H.M., 19
Kraposhin, V.S., 453

Kraus, S., 35
Krischok, S., 725
Kucherenko, Y., 957
Kuhlenbeck, H., 809
Kukuev, V.I., 485
Kumigashira, H., 369, 377
Kunii, S., 637
Kurganskii, S.I., 479
Kurmaeva, E. Z., 441
Kuroda, H., 707
Kuwahara, H., 281
Kuwata, Y., 281, 308

Landers, R., 429, 435
Lay, G.L., 711
Layet, J.M., 613
Le Lay, G., 613
Lebedev, A.M., 267, 275
Lee, J.B., 733
Lee, S.B., 733
Li-Ming, Y., 321
Likhachev, E.R., 479
Lonza, D., 991
Lower, J., 59
Lvov, I.B., 109

Maeda, F., 779
Magara, T., 867
Magkoev, T.T., 597
Magnée, R., 855
Magome, T., 597
Maier, K., 19
Makhneva, T.M., 449
Mamiya, K., 303, 361, 411
Manukovskii, E.Y., 969
Maratkanova, A.N., 339
Marsi, M., 991
Marumo, F., 997
Mase, K., 793, 831
Masuda, S., 97, 933, 997
Materlik, G., 241, 683
Matsubayashi, N., 545, 763, 817
Matsumoto, M., 597
Matsumoto, Y., 585, 665
Matsumura, T., 369, 377
Matsuo, H., 831
Matsushita, T., 308, 315, 361, 419, 939
Matthew, J.A.D., 171
Maus-Friedrichs, W., 725, 757
Mazaki, Y., 867
Mekhalif, Z., 855
Menke, D., 1009
Merkel, M., 983, 1009
Mikado, T., 677
Mimura, K., 365
Misumoto, R., 919
Miyahara, T., 195, 213, 308, 419, 939
Miyamae, T., 843, 875, 891, 905
Miyamoto, N., 747
Miyanaga, T., 523
Miyanishi, S., 225
Mizokawa, T., 303, 411
Mizutani, U., 415
Mochida, T., 793
Mok, C.Y., 91, 97
Morikawa, E., 913
Morikawa, K., 303
Moritomo, Y., 281
Munakata, T., 591
Muramatsu, N., 533
Muramatsu, Y., 53, 905
Murata, Y., 597
Muro, T., 191, 195, 281, 308, 315, 361
Mutoh, H., 97

Nagano, H., 495
Nagao, K., 1031
Nagasono, M., 793
Nagoshi, M., 467, 503
Nakagawa, K., 793
Nakagawa, Y., 767
Nakama, T., 545
Nakamizo, H., 717
Nakamura, A., 643, 767
Nakane, T., 801, 805
Nakao, A., 945
Nakatake, M., 365, 1027
Nakatani, T., 419
Nakateke, M., 425
Nakatsuji, K., 213, 287, 473, 489
Nakayama, K., 527
Nakayama, Y., 495
Namatame, H., 365, 391, 419, 1027
Namba, H., 707
Nantoh, M., 1003
Nath, K.G., 369, 377
Nebogatikov, N.N., 485
Neeb, M., 19
Nefedov, V.I., 509
Nemoshkalenko, V.V., 385
Nessler, W., 495
Neumann, M., 441
Neville, J.J., 71
Nihei, Y., 517, 545, 1021
Nishihara, Y., 303, 695
Nishijima, A., 545
Noda, T., 801, 805
Nohara, S., 411
Nomura, M., 919
Noro, H., 467
Note, R., 415
Nozawa, K., 415

Oberli, D., 179
Ochiai, A., 308, 315
Ochs, D., 725, 757
Oelsner, A., 185
Ogasawara, H., 261, 369, 377, 1003
Ogawa, S., 495
Ohdaira, T., 677
Ohmori, K., 1031
Ohno, K., 143, 149, 155, 927
Ohta, T., 405, 707
Ohta, Y., 671
Ohtani, T., 619
Ohuchi, Y., 919
Ojima, K., 619
Okada, K., 255
Okamura, Y., 1027
Okane, T., 631
Okuda, H., 293, 333, 425
Okuda, T., 287, 473, 489
Okudaira, K., 849, 885
Okudaira, K.K., 837, 881, 913
Okude, N., 467
Okunishi, M., 1031
Omori, S., 517, 545
Ono, K., 207, 603
Orlowski, B.A., 321, 327
Oshima, M., 603
Ota, K., 571
Otani, S., 801
Otsuki, Y., 793
Ottaviani, C., 711
Ouchi, Y., 875
Owari, M., 1021
Ozaki, H., 867, 933, 997
Ozawa, K., 801, 805
Ozawa, R., 717
Õnuki, Y., 353

Pan, J.F., 91
Park, C.Y., 701, 733

Park, R.J., 733
Patthey, L., 539
Pawlik, S., 179
Perfetti, P., 711
Perlov, A., 957
Petek, H., 495
Piancastelli, M.N., 19
Pireaux, J.J., 855
Ponomarev, A.G., 343
Popov, A., 725
Popova, O.V., 485, 977
Prince, K.C., 711
Puchin, V., 725

Qiao, S., 229
Quitmann, C., 1015

Rader, O., 207, 225
Reihl, B., 1015
Riga, J., 855, 951
Ross, K.J., 1031
Ruts, Y.V., 551, 557
Rüdel, A., 19

Saeki, M., 308
Saijyo, S., 793
Saiki, K., 457
Saile, V., 913
Saito, N., 65
Saito, T., 763, 767
Saito, Y., 353, 395, 625, 631, 905
Saitoh, Y., 191
Sakamoto, H., 747
Sakamoto, K., 897
Sakashita, T., 591
Sakurai, Y., 905
Sameshima, J., 281
Sanada, N., 609
Sasaki, H., 347
Sasaki, T., 773
Sasaki, T.A., 467, 603
Sataka, M., 83, 87
Sato, H., 293, 333, 365, 391, 419, 425
Sato, N., 353, 631
Sato, S., 125, 131, 137, 347, 353, 395, 625, 631, 637
Sato, Y., 53, 603, 1031
Satok N., 861
Sawada, M., 201, 229
Sawada, Y., 927
Schattke, W., 213, 563
Schicketanz, M., 185
Schmidt, O., 983, 1009
Schneider, C.M., 983
Schönhense, G., 185, 983, 1009
Seddon, E.A., 171
Seider, M., 983
Seki, K., 821, 875, 891, 905, 913, 919
Sekiba, D., 717
Sekitani, T., 831, 837
Sekiyama, A., 281, 308, 315, 361, 419, 939
Senba, S., 293, 365, 425
Senkevich, A.I., 385
Shabanova, I.N., 339, 343, 449, 453, 485, 977
Sham, T.K., 241
Shamin, S.N., 441
Shamin, V.A., 557
Shchukarev, A.V., 969
Shibata, H., 83, 87
Shigemasa, E., 9, 53
Shimada, H., 545, 763, 817
Shimada, K., 207, 225, 333, 365, 391
Shimatani, T., 533
Shimizu, Y., 1031
Shimomura, M., 609
Shimoyama, I., 793
Shimoyama, J., 495
Shin, S., 287, 293, 415, 473, 489, 597
Shinohara, H., 131, 927
Shirai, M., 207, 225, 357
Shiraki, S., 545, 1021
Shirota, Y., 885
Shpak, A.P., 973
Shudo, K.-I., 591
Slabzhennikov, S.N., 109
Soda, K., 415
Sokolov, O.B., 551
Sokolova, N.S., 457
Solovyev, I.V., 441
Solterbeck, C., 563
Solterbeck, C.-H., 213
Sosnov, V.A., 339
Sporken, R., 951
Sprunger, P.T., 913
Stadler, S., 411
Starrost, F., 563
Stolterfoht, N., 83, 87
Story, T., 327
Stracke, P., 725
Suezawa, M., 395
Suga, S., 191, 195, 213, 281, 287, 308, 315, 361, 419, 473, 489, 701, 939
Sugawara, H., 419
Sur, R., 809
Surnin, D.V., 551
Susaki, T., 361
Suto, S., 897
Suzuki, I.H., 65
Suzuki, R., 677, 933, 997
Suzuki, S., 347, 353, 395, 625, 631, 637
Suzuki, T., 308, 315, 369, 377, 897
Suzuki, Y., 609, 945
Swiech, W., 983
Syono, Y., 503

Tachiki, M., 503
Taguchi, Y., 671
Takabatake, T., 391, 411
Takada, K., 333
Takagi, H., 213, 489
Takahashi, K., 347, 637
Takahashi, M., 1031
Takahashi, N., 219
Takahashi, T., 369, 377, 461
Takakuwa, Y., 533, 747
Takata, Y., 235, 405
Takeda, Y., 391, 619
Takei, H., 461
Takenaka, H., 787
Takeuchi, T., 609
Tamura, K., 637
Tanaka, A., 293, 347, 425, 637
Tanaka, H., 149
Tanaka, K., 831, 837
Tanaka, M., 207, 461, 571
Tanaka, S., 689, 793, 831
Tanaka, S.-I., 219, 297, 665, 997
Tanigawa, S., 545
Taniguch, M., 365
Taniguchi, M., 293, 333, 391, 419, 425, 1027
Tawara, H., 83, 87
Tchirkova, E.I., 977
Terauchi, T., 281
Terebova, N.S., 449
Terekhov, V.A., 969
Teterin, A.Y., 267, 275
Teterin, Y.A., 267, 275
Tezuka, Y., 287, 415, 473, 489, 597

Tiedje, O., 563
Tokioka, Y., 357
Tokiwa-Yamamoto, A., 503
Tokura, Y., 281, 473
Trachevskii, V.V., 973
Treusch, R., 683
Trofimova, V.A., 441
Tsukamot, T., 945
Tsunekawa, M., 308, 419
Tsunematsu, H., 637
Tsutsumi, K., 861
Tsuzuki, T., 885
Tukuda, H., 933
Turci, C.C., 77

Uda, M., 643, 767
Ueda, K., 1, 53, 1031
Ueda, S., 191, 281, 308, 361, 419
Ueda, Y., 293, 333, 425
Ueno, N., 837, 849, 875, 881, 885, 891, 905, 913, 933
Ufuktepe, Y., 369, 377
Uhrberg, R., 399
Umishita, K., 843
Urano, T., 619
Usami, S., 571
Ustinov, A.Y., 103, 109, 119
Ustinova, O.M., 103
Utkin, I.O., 267, 275
Uvarov, V.N., 385

Valeri, S., 741
Väyrynen, J., 399
Vos, M., 247
Vovna, V.I., 103, 109, 119

Wakita, T., 897
Watanabe, K., 665
Watanabe, Y., 779
Weber, W., 179
Weigold, E., 59, 247
Wolf, M., 577
Woolf, D.A., 219
Wuilleumier, F.J., 41

Xu, Y.B.O., 171
Xu, Z.P., 97

Yagishita, A., 213
Yakushi, K., 891
Yamaguchi, T., 747
Yamakado, H., 149, 155, 927
Yamaki, K.-I., 353, 631
Yamakita, Y., 155
Yamamoto, H., 467
Yamamoto, K., 707
Yamamoto, S., 837
Yamamoto, T., 643, 767, 905
Yamauchi, M., 155
Yamazaki, T., 677
Yamazaki, Y., 83, 87
Yanagawa, T., 527
Yanagida, S., 1031
Yanagida, Y., 415
Yaresko, A., 957
Yarmoshenko, Y.M., 441
Yarnamoto, K., 405
Yeom, H.W., 609
Yikegaki, T., 649
Yokota, T., 881
Yokoya, T., 461
Yokoyama, T., 405
Yokoyama, Y., 415
Yoneyama, K., 919
Yoshida, H., 861
Yoshihara, K., 131
Yoshii, K., 603
Yoshimura, D., 875
Yoshimura, Y., 603
Yoshinobu, J., 665, 997, 1003
Yoshioka, H., 281
Yurakov, Y.A., 963

Zatsepin, D.A., 441
Ziethen, Ch., 983, 1009

ELSEVIER

Journal of Electron Spectroscopy and Related Phenomena 88–91 (1998) 1043–1064

JOURNAL OF ELECTRON SPECTROSCOPY and Related Phenomena

Subject index

(e,2e) collisions
Dichroism in (e,2e) ionizing collisions with laser-oriented sodium atoms 59
1,2,4,5-Tetrafluorobenzene
ZEKE photoelectron spectroscopy and ab initio force-field calculation of 1,2,4,5-tetrafluorobenzene 137
180° deflection toroidal analyser
Design of an input lens system for a 180° deflection toroidal analyser using trajectory simulation 1021
2 × 2
Electronic structure of Si(113)2 × 2–Cs surface studied by ARUPS 701
2 MeV/u Si^{q+} and S^{q+} ions
Electron spectra from fast projectile Si and S ions studied by zero-degree electron spectroscopy 87
2D-ARPES
Two-dimensional angle-resolved resonance photoelectron spectroscopy of 1*T*-TaS_2 287
2p–3d interaction
2p–3d resonant photoemission in Ti metal 399
3*d*–4*f* resonance
Resonant photoemission studies of thulium monochalcogenides around the Tm 3*d* threshold 377
3*d*-4*f* resonant photoemission
Effects of Coster–Kronig decay on Ce 3*d*-4*f* resonant photoemission spectra of $CeOs_2$ 419
4d metals
Measurement of the 2p XPS spectra of 4d metals: Nb to Sb 429
4f electron
Correlated electronic states of Yb_4As_3 studied with photoemission 315
High-resolution and low-temperature photoemission study of a Kondo insulator 391
π-bonded ethylene
Adsorption of π-bonded ethylene and ethynyl on Pd(110): an STM study 1003
π-conjugated polymers
Ultraviolet photoelectron spectroscopy of poly (anthraquinone)s and poly(1,10-phenanthroline-3,8-diyl); their electronic structure and K-doped states 905
ab initio electronic structure calculations
Characterization of LiF and CaF_2 surfaces using MIES and UPS (HeI) 725
Ab initio MO calculation
ZEKE photoelectron spectroscopy and ab initio force-field calculation of 1,2,4,5-tetrafluorobenzene 137
Aberration
Design of an input lens system for a 180° deflection toroidal analyser using trajectory simulation 1021
Acetonitrile
Photon stimulated ion desorption of condensed acetonitrile molecules induced by core excitation 831
Acetyl acetone (AcAc)
X-ray photoelectron spectroscopic investigation of metallorganic complexes 977
Acetylacetonates
Experimental and theoretical investigation of aluminium, gallium and indium tris-acetylacetonates ground, excited and ionized states nature 103
Acetylene
Real time observation of coadsorption layers of acetylene/CO and acetylene/O on Ru(001) using a temperature-programmed ESDIAD/TOF system 773
Adsorbates
Electron spectroscopic study of the interaction of WC(0001) with different adsorbates (C_6H_6, CO and NO) 809
The dependence of dichroism in VUV-photoemission on the optical properties of adsorbates: Cs-monolayer on W(110) 185
Adsorbed CO
Electronic structure of a Pt(111)–Ge surface alloy and adsorbed CO 597
Adsorption
Spin- and angle-resolved photoelectron spectroscopy from ferromagnetic Ni(110), Ni(110-p(2 × 1)O and Ni(110)-c(2 ×2)S 229
Two-photon photoemission from benzene adsorbed on Cu(111) 591
Time-resolved core-level photoelectron spectroscopy on Sb-terminated GaAs(001) under Sb supply control

at growth temperature 779
O_2 adsorption on clean and K-modified ZrC(111) surfaces 801
Adsorption of methanol on TiC(100) and (111) surfaces 805
Adsorption sites
Adsorption of π-bonded ethylene and ethynyl on Pd(110): an STM study 1003
AES
Positron annihilation induced Auger electron spectroscopy with an intense slow-positron beam 677
Ag
Work function of polycrystalline Ag, Au and Al 643
Al
Successive change in work function of Al exposed to air 767
$Al_{72}Ni_{12}Co_{16}$
Inverse photoemission and soft X-ray emission spectra of Al-Ni-Co decagonal single quasicrystal 415
Alkali-Metal
O_2 adsorption on clean and K-modified ZrC(111) surfaces 801
Alloy
Energy shifts and electronic structure changes in alloys: an unfulfilled promise? 435
AlO(OH)
Successive change in work function of Al exposed to air 767
Aluminium
Quantitative electron momentum spectroscopy of aluminium films 247
Amorphous
Application of the XPS method to the study of relaxation processes in transition metal melts 343
Amorphous alloy surfaces
Spin polarized photoemission from amorphous alloy surfaces 171
Anderson impurity model
Photoemission and inverse-photoemission study of ferromagnetic valence fluctuating system CeF_2 303
Photoemission and inverse-photoemission study of CeNiSn 411
Angle-resolved photoelectron spectra
Circular dichroism in the angular distribution of core-level photoelectrons from GaAs (111) 219
Angle-resolved photoelectron spectroscopy
Observation of the surface states on CuCl(100) 689
Angle-resolved photoemission
Angle-resolved photoemission spectroscopy of $SrCuO_2$: spin–charge separation? 461
Angle-resolved photoemission spectroscopy
Angle-resolved photoemission study of quantized electronic structures on Ag nanofilms 347
Angle-resolved photoemission study of the surface electronic structure on NdB_6 (110) clean surface 637
Angle-resolved ultraviolet photoelectron spectra
Comparison between calculated and measured photoemission spectra of C_{60} thin films 891
Angle-resolved ultraviolet spectroscopy
Electronic structure of Si(113)2 × 2–Cs surface studied by ARUPS 701
Angle-resolved UPS
Angle-resolved UPS study and simulation with IAC approximation for oriented monolayer of tetratetracontane (n-$C_{44}H_{90}$) on Cu(100) 875
Angle-resolved valence-band spectra
Surface electronic structure of InAs(100)1x2/1x4-Pb 613
Angular distributions
Angular distributions of 1s photoelectrons from fixed-in-space molecules as a probe of shape resonances 9
Annealing
Work function of polycrystalline Ag, Au and Al 643
Antisite defects
Electronic states and optical properties of β-SiC containing paired antisite defects 957
ARPES
Fermi surface of Sr_2RuO_4 studied by two-dimensional angle resolved photoelectron spectroscopy 473
ARUPS
Photoemission studies of functional organic materials and their interfaces 821
ARXPS
Theory of damping in forward scattering photoelectron diffraction due to thermal spherical wave effects 527
Atomic sash
Attempt to pile up extrathin sashlike macromolecules (atomic sashes) 867
Atomic tape
Penning ionization electron spectroscopy of atomic tape: an extrathin superstructure constructed by intramonolayer hydrogen bonds on a solid surface 933
Au_3^-
Femtosecond photoelectron spectroscopy of the photodissociation of Au_3^- 35
Auger electron photoion coincidence (AEPICO)
Fundamental processes of radiation damage of benzene solid studied by auger electron photoion coincidence spectroscopy 793
Auger electron spectroscopy
Resonant Auger electron spectroscopy for analysis of the chemical state of phosphorus segregated at SiO_2/Si interfaces 603

Elastic and inelastic contributions to the angular intensity anisotropy of electron emission 741
Fundamental processes of radiation damage of benzene solid studied by auger electron photoion coincidence spectroscopy 793
Photon stimulated ion desorption of condensed acetonitrile molecules induced by core excitation 831
Apparatus for studying decay and dissociation of core excited molecules 1031
Auger electron–photoion coincidence (AEPICO)
Photon stimulated ion desorption of condensed acetonitrile molecules induced by core excitation 831
Auger parameter
Cesium core level binding energy shifts at the O_2/Cs/Si(113) surface 733
Auger shifts
Energy shifts and electronic structure changes in alloys: an unfulfilled promise? 435
Auger spectroscopy
Resonant L_3–$M_{4,5}N_{4,5}$ Auger electron spectroscopy as a probe for the local electronic structure in Pd_xAg_{1-x} alloys 241
Auger transition
Effects of Coster–Kronig decay on Ce 3*d*-4*f* resonant photoemission spectra of $CeOs_2$ 419
Ni 2*p* resonant photoelectron spectra of some planar nickel complexes 235

Ba
UPS study of electronic states of Ba on Si(001) surface 619
Band structure
Electron-energy-loss spectroscopy of cadmium fluoride 457
Band structure calculation
Theoretical study on photoemission spectra of ferromagnetic manganese pnictides 357
Bandstructure
Surface preparation and spin-resolved photoemission of epitaxial MnSb(001) films on GaAs(111) 225
Barium halides
Simultaneous measurements of photoelectron and luminescence of barium halides 297
Benzene
Fundamental processes of radiation damage of benzene solid studied by auger electron photoion coincidence spectroscopy 793
Photoemission study of benzene adsorbed on Si surfaces 671
Two-photon photoemission from benzene adsorbed on Cu(111) 591
Benzene–N_2
Zero kinetic energy (ZEKE) photoelectron study of the benzene–N_2 and fluorobenzene–N_2 van der Waals complexes 131
Bi(2212)
Symmetry analysis of the Fermi surface of $Bi_2Sr_2CaCu_2O_8$ by display analyzer 489
$Bi_2Sr_2CaCu_2O_{8+\delta}$
Energy relaxation and dephasing times of excited electrons in $Bi_2Sr_2CaCu_2O_{8+\delta}$ from interferometric 2-photon time-resolved photoemission 495
Binding energies
Measurement of the 2p XPS spectra of 4d metals: Nb to Sb 429
Branching ratio
Two-dimensional Penning ionization electron spectrum of N_2 by collision with He* (2^3S) metastable atoms 143
Bremsstrahlung isochromat spectroscopy
X-ray photoemission and bremsstrahlung isochromat spectroscopy of bulk single crystalline Si_xGe_{1-x} alloys 395
Brittleness threshold
XPS study of electronic structure change of the Fe–Cr system at temperatures below the brittleness threshold 449
Butyrolactones
He I and He II photoelectron spectra of γ-thionobutyrolactones and γ-butyrolactones 91

C-foil target
Electron spectra from fast projectile Si and S ions studied by zero-degree electron spectroscopy 87
C_{60}
Comparison between calculated and measured photoemission spectra of C_{60} thin films 891
C_{102}
Ultraviolet photoelectron spectra of a higher fullerene C_{102} and its potassium complex 843
Cadmium fluoride (CdF_2)
Electron-energy-loss spectroscopy of cadmium fluoride 457
CaF_2
Characterization of LiF and CaF_2 surfaces using MIES and UPS (HeI) 725
Calcium
Peculiarities of the electronic structure of the ultra disperse calcium hydroxyapatite 973
Calcium fluoride
Surface structure of thin CaO layers formed on CaF_2(111) studied by photoelectron diffraction 545

Calcium oxide
Surface structure of thin CaO layers formed on CaF_2(111) studied by photoelectron diffraction 545
Carbon monoxide
Two-photon photoemission study of CO/Pt(111) 585
Real time observation of coadsorption layers of acetylene/CO and acetylene/O on Ru(001) using a temperature-programmed ESDIAD/TOF system 773
CDAD
Observation of circular dichroism in angular distribution of the valence band photoelectron from Si(001) in UPS region 213
$Ce_3Bi_4Pt_3$
High-resolution and low-temperature photoemission study of a Kondo insulator 391
$CeOs_2$
Effects of Coster–Kronig decay on Ce 3*d*-4*f* resonant photoemission spectra of $CeOs_2$ 419
CePdAs
High resolution resonance photoemission, XPS and inverse photoemission spectroscopy of CePdX (X = As, Sb) 309
CePdSb
High resolution resonance photoemission, XPS and inverse photoemission spectroscopy of CePdX (X = As, Sb) 309
Ceria
XPS comparative study of ceria/zirconia mixed oxides: powders and thin film characterisation 951
Cerium compounds
The XPS spectra of cerium compounds containing oxygen 275
Cesium
Cesium core level binding energy shifts at the O_2/Cs/Si(113) surface 733
Charge density wave
Two-dimensional angle-resolved resonance photoelectron spectroscopy of 1*T*-TaS_2 287
Charge distribution
XPS and XANES study on $Pb_2Sr_2YCu_3O_{8+\delta}$ and $PbBaSr(YCa)Cu_3O_{7+\delta}$ 503
Charge ordering
Correlated electronic states of Yb_4As_3 studied with photoemission 315
Charge states
The peculiarities of the crystal and electronic structure of the zirconolite-type compounds $Ln_2Ti_2O_7$ (Ln = Rare Earth Elements) 385
Charge transfer
SiC islands grown on Si(111)-(7 × 7) and Si(001)-(2 × 1) surfaces by C_{60} precursor 897
Charge transfer band
Ni 2p excitation spectra of some planar Ni complexes 405
Chemisorption
Electronic structure investigation of Ag(110)/1 × 2-O surface 717
Photoemission study of benzene adsorbed on Si surfaces 671
Real time observation of coadsorption layers of acetylene/CO and acetylene/O on Ru(001) using a temperature-programmed ESDIAD/TOF system 773
Two-photon photoemission study of CO/Pt(111) 585
Electronic structures in the valence region of chemisorbed and physisorbed species on Pd(110) 665
Chloroaluminium phthalocyanine
High-resolution electron energy loss spectroscopy of chloroaluminium phthalocyanine ultrathin films 881
Chromium chalcogenides
Electronic structure of chromium chalcogenides 333
Chrysene
Study of polycyclic aromatic hydrocarbons in the solid state by collision energy resolved Penning ionization electron spectroscopy 927
CIHF calculations
High resolution L Auger electron spectra from fast projectile ions studied by zero-degree electron spectroscopy 83
Circular dichroism
Circular dichroism in the angular distribution of core-level photoelectrons from GaAs (111) 219
Clean surface
Angle-resolved photoemission study of the surface electronic structure on NdB_6 (110) clean surface 637
Cluster
Application of the XPS method to the study of relaxation processes in transition metal melts 343
XPS study of transition metal electronic structure in crystalline and liquid states 453
Cluster calculations
The peculiarities of the crystal and electronic structure of the zirconolite-type compounds $Ln_2Ti_2O_7$ (Ln = Rare Earth Elements) 385
Cluster formation
High-resolution photoemission combined with low-temperature STM 1015
CO_2
Interaction of small molecules with Mg and MgO surfaces studied with MIES and UPS(HeI) 757
Coherence
Dynamics and coherence of resonant X-ray Raman scattering 29

Coincidence
Multi-charged rare gas ions measured with a coincidence technique 65
Apparatus for studying decay and dissociation of core excited molecules 1031
Collision energy
Two-dimensional Penning ionization electron spectrum of N_2 by collision with He* (2^3S) metastable atoms 143
Combined analysis
XAS and XPS studies on molecular and dissociative adsorption of nitric oxide on Rh 763
Copper
Two-photon photoemission from benzene adsorbed on Cu(111) 591
Copper(111) surface
Temperature dependence of surface state lifetimes, dephasing rates and binding energies on Cu(111) studied with time-resolved photoemission 577
Core excitation
Decay and dissociation dynamics of core-excited polyatomic molecules 1
Electron emission from PH_2 produced via fast dissociation of core-excited PH_3 53
Ni 2*p* resonant photoelectron spectra of some planar nickel complexes 235
Photon stimulated ion desorption of condensed acetonitrile molecules induced by core excitation 831
Photon stimulated ion desorption of deuterated polystyrene thin films induced by core excitation 837
Core level
4*d* Core-level resonant photoemission spectroscopy of thulium monochalcogenides around the Tm 3*d* threshold 369
Core level photoelectron spectroscopy
Vibrational fine structure on the core level photoelectron lines of small polyatomic molecules 19
Core-level photoemission
Large-cluster effects on core-level photoemission spectra of quasi-one-dimensional copper compounds 255
Core-level spectroscopy
Surface core-level shifts of Si(111)7 × 7: a critical evaluation of the Si 2*p* analysis 711
Corner-sharing
Large-cluster effects on core-level photoemission spectra of quasi-one-dimensional copper compounds 255
Coronene
Study of polycyclic aromatic hydrocarbons in the solid state by collision energy resolved Penning ionization electron spectroscopy 927
Correlation diagram
He I and He II photoelectron spectra of thiophenones 97
Coster–Kronig transition
Effects of Coster–Kronig decay on Ce 3*d*-4*f* resonant photoemission spectra of $CeOs_2$ 419
Electron spectra from fast projectile Si and S ions studied by zero-degree electron spectroscopy 87
Ni 2*p* resonant photoelectron spectra of some planar nickel complexes 235
Crystal field
MCD in 2*p* and 3*p* XAS of Mn–Zn ferrite 195
Cs
Electronic structure of Si(113)2 × 2–Cs surface studied by ARUPS 701
CuCl
Observation of the surface states on CuCl(100) 689
CVD carbon
Surface analysis of CVD carbon using NEXAFS, XPS and TEM 919

d-states
Peculiarities of the electronic structure of the ultra disperse calcium hydroxyapatite 973
d–d* excitation
Soft X-ray emission spectroscopy of NiAs-type MnTe at the Mn 2p core threshold 293
DCNQI-Cu
X-Ray photoemission study of an organic quasi-1D DCNQI-Cu salt 939
Debye–Waller Factors
Theory of thermal factors in photoelectron diffraction for strongly anharmonic systems 523
Decagonal quasicrystal
Inverse photoemission and soft X-ray emission spectra of Al-Ni-Co decagonal single quasicrystal 415
Dephasing
Energy relaxation and dephasing times of excited electrons in $Bi_2Sr_2CaCu_2O_{8+\delta}$ from interferometric 2-photon time-resolved photoemission 495
Dichroism
The dependence of dichroism in VUV-photoemission on the optical properties of adsorbates: Cs-monolayer on W(110) 185
Dimer structure
Dimer structure of clean Si(001) surface studied by grazing-incidence back-scattering MEED 533
Dimethylphthalate
Electron impact core excitation of molecules: non-dipole spectroscopy and generalized oscillator strengths 77

Direct scattering
Calculation of electron-energy-loss spectra for 3s → 3d excitation in transition metal oxides 261
Display analyzer
Symmetry analysis of the Fermi surface of $Bi_2Sr_2CaCu_2O_8$ by display analyzer 489
Dissociation
Fundamental processes of radiation damage of benzene solid studied by auger electron photoion coincidence spectroscopy 793
Dissociation dynamics
Decay and dissociation dynamics of core-excited polyatomic molecules 1
Dissociative adsorption
XAS and XPS studies on molecular and dissociative adsorption of nitric oxide on Rh 763
DM-PBDCI
Photoemission and inverse photoemission studies on a thin film of *N,N'*-dimethylperylene-3,4,9,10-bis(dicarboximide) 861
Doping
Ultraviolet photoelectron spectroscopy of poly (anthraquinone)s and poly(1,10-phenanthroline-3,8-diyl); their electronic structure and K-doped states 905
Double Auger
Multi-charged rare gas ions measured with a coincidence technique 65
Dynamic effects
Dynamics and coherence of resonant X-ray Raman scattering 29

Edge-sharing
Large-cluster effects on core-level photoemission spectra of quasi-one-dimensional copper compounds 255
EELFS
Application of the electron energy loss fine structure technique to the investigation of the Al–Ag binary system 557
Nitrogen adsorption on an W(100) surface studied by an analysis of electron energy-loss fine structure 571
Test solution of the idnverse problem for the determination of pair correlation function in the secondary electron extended fine structue technique 551
EELS
A self-consistent optical potential theory for atoms in solids 649
Elastic scattering
The influence of the photoelectron elastic scattering on the photoelectron diffraction patterns, in-depth profiling and thin film thickness determination 509
Electroluminescent device
Photoemission studies of functional organic materials and their interfaces 821
Electron bombardment
Nitrogen adsorption on an W(100) surface studied by an analysis of electron energy-loss fine structure 571
Electron correlation
Spin-resolved photoemission of ferromagnetic Ni valence band 163
Electron dynamics
Spin-dependent electron dynamics investigated by means of time- and spin-resolved photoemission 179
Electron energy loss spectroscopy
Electron impact core excitation of molecules: non-dipole spectroscopy and generalized oscillator strengths 77
SiC islands grown on Si(111)-(7 × 7) and Si(001)-(2 × 1) surfaces by C_{60} precursor 897
Electron energy loss spectrum
Calculation of electron-energy-loss spectra for 3s → 3d excitation in transition metal oxides 261
Electron momentum spectroscopy
Quantitative electron momentum spectroscopy of aluminium films 247
Electron paramagnetic resonance (EPR)
X-ray photoelectron spectroscopic investigation of metallorganic complexes 977
Electron spectroscopy
Electron spectroscopic study of the interaction of WC(0001) with different adsorbates (C_6H_6, CO and NO) 809
Electron–electron scattering
Energy relaxation and dephasing times of excited electrons in $Bi_2Sr_2CaCu_2O_{8+\delta}$ from interferometric 2-photon time-resolved photoemission 495
Electron-electron correlation
Electronic structure of chromium chalcogenides 333
Electron-energy-loss spectroscopy (EELS)
Electron-energy-loss spectroscopy of cadmium fluoride 457
Electronic interaction
High-resolution XAS spectrum of interstitial nitrogen molecules in the surface oxide matrix of TiAlN film 817
Electronic spectra
Electronic structure of some bis-β-diketonates of zinc and their thio-analogs 119
Electronic structure
Angle-resolved UPS study and simulation with IAC approximation for oriented monolayer of tetratetracontane (n-$C_{44}H_{90}$) on Cu(100) 875

Annealing temperature dependence on the electronic structure of the reduced $SrTiO_3$ (111) surface 695
Electronic states and optical properties of β-SiC containing paired antisite defects 957
Electronic structure near the fermi level and STM images of Pd(110)c(4 × 2)-benzene 997
Electronic structure of a Pt(111)–Ge surface alloy and adsorbed CO 597
Electronic structure of chromium chalcogenides 333
Electronic structure of some bis-β-diketonates of zinc and their thio-analogs 119
Electronic structure of ternary transition metal oxides and sulphides: X-ray photoelectron and X-ray emission spectroscopy study 441
InP(100)-(2 × 4) surface electronic structure studied by angle-resolved photoelectron spectroscopy 609
Mn 2p–3d resonant photoemission spectroscopy of MnY (Y = S, Se, Te) 425
Photoemission and inverse-photoemission study of ferromagnetic MnSb thin film grown by hot-wall epitaxy 365
Satellites in core level XPS spectra of the Fe-based systems 339
Surface preparation and spin-resolved photoemission of epitaxial MnSb(001) films on GaAs(111) 225
The peculiarities of the crystal and electronic structure of the zirconolite-type compounds $Ln_2Ti_2O_7$ (Ln = Rare Earth Elements) 385
The photoelectron spectroscopy and electronic structure of metal β-Diketonates and their analogs 109
XPS study of electronic structure change of the Fe–Cr system at temperatures below the brittleness threshold 449
Ultraviolet photoelectron spectra of a higher fullerene C_{102} and its potassium complex 843
Ultraviolet photoelectron spectroscopy of poly (anthraquinone)s and poly(1,10-phenanthroline-3,8-diyl); their electronic structure and K-doped states 905

Electronic structure information
Energy shifts and electronic structure changes in alloys: an unfulfilled promise? 435

Electronic surface states
Temperature dependence of surface state lifetimes, dephasing rates and binding energies on Cu(111) studied with time-resolved photoemission 577

Energy band dispersion
Photoemission studies of functional organic materials and their interfaces 821

Energy XPS
Tunable high-energy X-ray photoemission 683

ESD
Characterization of LiF and CaF_2 surfaces using MIES and UPS (HeI) 725

ESDIAD
Real time observation of coadsorption layers of acetylene/CO and acetylene/O on Ru(001) using a temperature-programmed ESDIAD/TOF system 773

Etching
In situ observation of thermal and photon-induced reactions on Si surfaces by ultraviolet photoelectron spectroscopy 747

Ethynyl
Adsorption of π-bonded ethylene and ethynyl on Pd(110): an STM study 1003

EXAFS
Test solution of the idnverse problem for the determination of pair correlation function in the secondary electron extended fine structue technique 551

Exchange scattering
Calculation of electron-energy-loss spectra for 3s → 3d excitation in transition metal oxides 261

Exchange splitting
Photoemission and inverse-photoemission study of ferromagnetic MnSb thin film grown by hot-wall epitaxy 365
Surface preparation and spin-resolved photoemission of epitaxial MnSb(001) films on GaAs(111) 225

Extinction rule
Principles of crystallography using Bragg reflection from atomically localized sources 517

Extrathin molecular superstructure
Penning ionization electron spectroscopy of atomic tape: an extrathin superstructure constructed by intramonolayer hydrogen bonds on a solid surface 933

Extrathin superstructure
Attempt to pile up extrathin sashlike macromolecules (atomic sashes) 867

Fano effect
Fe 3p–3d Fano resonances in CdTe(111)/Fe and $Cd_{1-x}Fe_xTe$ 321

Fast dissociation
Electron emission from PH_2 produced via fast dissociation of core-excited PH_3 53

Fermi level
Electronic structure near the fermi level and STM images of Pd(110)c(4 × 2)-benzene 997

Fermi liquid theory
Energy relaxation and dephasing times of excited electrons in $Bi_2Sr_2CaCu_2O_{8+\delta}$ from interferometric 2-photon time-resolved photoemission 495

Fermi surface
Fermi surface of Sr_2RuO_4 studied by two-dimensional

angle resolved photoelectron spectroscopy 473
Symmetry analysis of the Fermi surface of $Bi_2Sr_2CaCu_2O_8$ by display analyzer 489
Fermi surface nesting
Two-dimensional angle-resolved resonance photoelectron spectroscopy of $1T$-TaS_2 287
Ferromagnetic MnSb
Photoemission and inverse-photoemission study of ferromagnetic MnSb thin film grown by hot-wall epitaxy 365
Ferromagnetic phase transition
Analysis of temperature-dependent spin-resolved photoemission of Ni(110) by a single-particle model 201
Ferromagnetic transition
Resonance and high-resolution photoemission study of CoS_2 361
Ferromagnetism
Spin- and angle-resolved photoelectron spectroscopy from ferromagnetic Ni(110), Ni(110-p(2 × 1)O and Ni(110)-c(2 ×2)S 229
Theoretical study on photoemission spectra of ferromagnetic manganese pnictides 357
Final state screening
Cesium core level binding energy shifts at the O_2/Cs/Si(113) surface 733
Fine structure
XPS study of transition metal electronic structure in crystalline and liquid states 453
Fixed-in-space molecules
Angular distributions of 1s photoelectrons from fixed-in-space molecules as a probe of shape resonances 9
Fluorobenzene–N_2
Zero kinetic energy (ZEKE) photoelectron study of the benzene–N_2 and fluorobenzene–N_2 van der Waals complexes 131
Focusing property
Design of an input lens system for a 180° deflection toroidal analyser using trajectory simulation 1021
Fullerenes
SiC islands grown on Si(111)-(7 × 7) and Si(001)-(2 × 1) surfaces by C_{60} precursor 897

GaAs
Time-resolved core-level photoelectron spectroscopy on Sb-terminated GaAs(001) under Sb supply control at growth temperature 779
GaAs (111)
Circular dichroism in the angular distribution of core-level photoelectrons from GaAs (111) 219
Gas source molecular beam epitaxy
In situ observation of thermal and photon-induced reactions on Si surfaces by ultraviolet photoelectron spectroscopy 747
Generalized oscillator strengths SF_6
Electron impact core excitation of molecules: non-dipole spectroscopy and generalized oscillator strengths 77
Graphite
Penning ionization electron spectroscopy of titanyl phthalocyanine ultrathin films: electronic state and molecular orientation 885
Grazing incidence X-rays
Surface analysis of Si/W multilayer using total reflection X-ray photoelectron spectroscopy 787
GW approximation
A self-consistent optical potential theory for atoms in solids 649

He-ion bombardment
Surface characterization of polymer modified by He-ion bombardment 945
Heavy fermion
Correlated electronic states of Yb_4As_3 studied with photoemission 315
X-ray photoelectron spectroscopy study of uranium compounds 353
HeI/HeII spectra
He I and He II photoelectron spectra of γ-thionobutyrolactones and γ-butyrolactones 91
He I and He II photoelectron spectra of thiophenones 97
High resolution photoemission
Correlated electronic states of Yb_4As_3 studied with photoemission 315
High temperature superconductivity
Energy relaxation and dephasing times of excited electrons in $Bi_2Sr_2CaCu_2O_{8+\delta}$ from interferometric 2-photon time-resolved photoemission 495
High-resolution
High-resolution photon detection system for inverse-photoemission spectroscopy 1027
Resonance and high-resolution photoemission study of CoS_2 361
High-resolution and low-temperature photoemission spectroscopy
High-resolution and low-temperature photoemission study of a Kondo insulator 391
High-resolution electron energy loss spectroscopy
High-resolution electron energy loss spectroscopy of chloroaluminium phthalocyanine ultrathin films 881
High-resolution photoemission
High-resolution photoemission combined with low-temperature STM 1015

Higher fullerene
Ultraviolet photoelectron spectra of a higher fullerene C_{102} and its potassium complex 843
Hollow atomic states
Photoelectron spectroscopy studies of hollow lithium states 41
HREELS
High-resolution electron energy loss spectroscopy of chloroaluminium phthalocyanine ultrathin films 881
On the impact of electron spectroscopies (versus optical techniques) to study organized organic layers and their interfaces 855
Hybridization
High resolution resonance photoemission, XPS and inverse photoemission spectroscopy of CePdX (X = As, Sb) 309
XPS study of electronic structure change of the Fe–Cr system at temperatures below the brittleness threshold 449
X-ray photoelectron study of the electronic structure of Y–Ba–Cu–O HTSC thin films in dependence on their composition and temperature 485
Hydroxyapatite
Peculiarities of the electronic structure of the ultra disperse calcium hydroxyapatite 973

IAC approximation
Angle-resolved UPS study and simulation with IAC approximation for oriented monolayer of tetra-tetracontane (n-$C_{44}H_{90}$) on Cu(100) 875
III–V semiconductor
InP(100)-(2 × 4) surface electronic structure studied by angle-resolved photoelectron spectroscopy 609
InAs(100)1x2/1x4-Pb
Surface electronic structure of InAs(100)1x2/1x4-Pb 613
Indirect exchange
X-ray photoelectron spectroscopy study of indirect exchange interaction in orthoniobate lanthanoids $LnNbO_4$ 267
Indium phosphide
InP(100)-(2 × 4) surface electronic structure studied by angle-resolved photoelectron spectroscopy 609
Information depth
Tunable high-energy X-ray photoemission 683
Inner-shell excitation
Fundamental processes of radiation damage of benzene solid studied by auger electron photoion coincidence spectroscopy 793
Ionic fragmentation of inner-shell excited molecules 71
InP(100)
InP(100)-(2 × 4) surface electronic structure studied by angle-resolved photoelectron spectroscopy 609
Input lens system
Design of an input lens system for a 180° deflection toroidal analyser using trajectory simulation 1021
Interaction
Application of the XPS method to the study of relaxation processes in transition metal melts 343
Electron spectroscopic study of the interaction of WC(0001) with different adsorbates (C_6H_6, CO and NO) 809
Interaction potential
Collision energy resolved Penning ionization electron spectra of polycyclic aromatic hydrocarbons 155
Study of polycyclic aromatic hydrocarbons in the solid state by collision energy resolved Penning ionization electron spectroscopy 927
Interface
Successive change in work function of Al exposed to air 767Photoemission studies of functional organic materials and their interfaces 821
Interference
Comparison between calculated and measured photo-emission spectra of C_{60} thin films 891
Intermolecular interactions
Adsorption of π-bonded ethylene and ethynyl on Pd(110): an STM study 1003
Intra-atomic correlations
Analysis of photoelectron spectra of high-temperature superconductors 479
Intramonolayer hydrogen bond
Penning ionization electron spectroscopy of atomic tape: an extrathin superstructure constructed by intra-monolayer hydrogen bonds on a solid surface 933
Inverse photoemission
Photoemission and inverse photoemission studies on a thin film of N,N'-dimethylperylene-3,4,9,10-bis(dicarboximide) 861
Inverse photoemission spectrum
Inverse photoemission and soft X-ray emission spectra of Al-Ni-Co decagonal single quasicrystal 415
Inverse-photoemission
Electronic structures of $Nd_{1-x}Sr_xMnO_3$, $La_{1-x}Sr_xMnO_3$ and $La_{1-x}Ca_xMnO_3$ studied by photoemission and inverse photoemission spectroscopy 281
High-resolution photon detection system for inverse-photoemission spectroscopy 1027
Ion spectroscopy
Apparatus for studying decay and dissociation of core excited molecules 1031

Ionization
Dichroism in (e,2e) ionizing collisions with laser-oriented sodium atoms 59
Ionization cross-section
Penning ionization of cobaltocene by collision with He*(2^2S) metastable atoms 149
Ionization potentials
He I and He II photoelectron spectra of γ-thionobutyrolactones and γ-butyrolactones 91
Ionization yield
Elastic and inelastic contributions to the angular intensity anisotropy of electron emission 741
IRAS
On the impact of electron spectroscopies (versus optical techniques) to study organized organic layers and their interfaces 855
Isomers
He I and He II photoelectron spectra of thiophenones 97
Itinerant ferromagnetism
Spin- and angle-resolved photoemission spectroscopy of ferromagnetic MnAs 207

K-shell photoionization
Angular distributions of 1s photoelectrons from fixed-in-space molecules as a probe of shape resonances 9
Kikuchi bands
Principles of crystallography using Bragg reflection from atomically localized sources 517
Kinetic energy
Photon stimulated ion desorption of deuterated polystyrene thin films induced by core excitation 837
Kondo insulator
High-resolution and low-temperature photoemission study of a Kondo insulator 391
Kondo semimetal
Photoemission and inverse-photoemission study of CeNiSn 411

L Auger electrons
High resolution L Auger electron spectra from fast projectile ions studied by zero-degree electron spectroscopy 83
L level XPS
Measurement of the 2p XPS spectra of 4d metals: Nb to Sb 429
Large-cluster effect
Large-cluster effects on core-level photoemission spectra of quasi-one-dimensional copper compounds 255
Laser excitation
Dichroism in (e,2e) ionizing collisions with laser-oriented sodium atoms 59
Laser method
Two-photon photoemission from benzene adsorbed on Cu(111) 591
Layer attenuation model
Anomalous diffraction effect on the surface core-level photoemission from Si(001) 2 × 1–Cs surface 539
LCAO
Electronic structure investigation of Ag(110)/1 × 2-O surface 717
LEED
A self-consistent optical potential theory for atoms in solids 649
LiF
Characterization of LiF and CaF_2 surfaces using MIES and UPS (HeI) 725
Lifetime broadening
4*d* Core-level resonant photoemission spectroscopy of thulium monochalcogenides around the Tm 3*d* threshold 369
Lifetimes
Measurement of the 2p XPS spectra of 4d metals: Nb to Sb 429
Ligand π^* orbital
Ni 2p excitation spectra of some planar Ni complexes 405
Linewidth analysis
Temperature dependence of surface state lifetimes, dephasing rates and binding energies on Cu(111) studied with time-resolved photoemission 577
Lithium
Photoelectron spectroscopy studies of hollow lithium states 41
Local area XANES
Fast elemental mapping and magnetic imaging with high lateral resolution using a novel photoemission microscope 983
Local separation
XPS study of electronic structure change of the Fe–Cr system at temperatures below the brittleness threshold 449
Local spin density approximation
Photoemission and inverse-photoemission study of ferromagnetic valence fluctuating system CeF_2 303
Local surface structure
Nitrogen adsorption on an W(100) surface studied by an analysis of electron energy-loss fine structure 571
Localization
Peculiarities of the electronic structure of the ultra disperse calcium hydroxyapatite 973
Low energy electron diffraction
Annealing temperature dependence on the electronic

structure of the reduced $SrTiO_3$ (111) surface 695
Low Temperatures
High-resolution photoemission combined with low-temperature STM 1015
Luminescence
Simultaneous measurements of photoelectron and luminescence of barium halides 297

Madelung potential
Cesium core level binding energy shifts at the O_2/Cs/Si(113) surface 733
Magnetic circular dichroism
MCD in 2*p* and 3*p* XAS of Mn–Zn ferrite 195
Magnetic domain imaging
Fast elemental mapping and magnetic imaging with high lateral resolution using a novel photoemission microscope 983
Magnetism
Electronic structures of $Nd_{1-x}Sr_xMnO_3$, $La_{1-x}Sr_xMnO_3$ and $La_{1-x}Ca_xMnO_3$ studied by photoemission and inverse photoemission spectroscopy 281
Spin-dependent electron dynamics investigated by means of time- and spin-resolved photoemission 179
Manganese chalcogenides
Mn 2p–3d resonant photoemission spectroscopy of MnY (Y = S, Se, Te) 425
Manganite
Electronic structures of $Nd_{1-x}Sr_xMnO_3$, $La_{1-x}Sr_xMnO_3$ and $La_{1-x}Ca_xMnO_3$ studied by photoemission and inverse photoemission spectroscopy 281
Many-body effects
Quantitative electron momentum spectroscopy of aluminium films 247
Mass spectrometry
Ionic fragmentation of inner-shell excited molecules 71
MCD
MCD in 2*p* and 3*p* XAS of Mn–Zn ferrite 195
MCDAD
Magnetic dichroism in angle resolved photoemission of ferromagnetic nickel 191
MEED
Dimer structure of clean Si(001) surface studied by grazing-incidence back-scattering MEED 533
Melt
Application of the XPS method to the study of relaxation processes in transition metal melts 343
XPS study of transition metal electronic structure in crystalline and liquid states 453
Metal nanofilms
Angle-resolved photoemission study of quantized electronic structures on Ag nanofilms 347
Metal–semiconductor interfaces
Ag + Au bilayers on Si(111) studied with scanning photoemission microscopy 991
Metallocene
Penning ionization of cobaltocene by collision with He*(2^2S) metastable atoms 149
Metallorganic complexes (MOC)
X-ray photoelectron spectroscopic investigation of metallorganic complexes 977
Metastable atom
Two-dimensional Penning ionization electron spectrum of N_2 by collision with He* (2^3S) metastable atoms 143
Metastable impact electron spectroscopy (MIES)
Characterization of LiF and CaF_2 surfaces using MIES and UPS (HeI) 725
Interaction of small molecules with Mg and MgO surfaces studied with MIES and UPS(HeI) 757
Methanol
Adsorption of methanol on TiC(100) and (111) surfaces 805
Mg
Interaction of small molecules with Mg and MgO surfaces studied with MIES and UPS(HeI) 757
MgO
Interaction of small molecules with Mg and MgO surfaces studied with MIES and UPS(HeI) 757
Mixed oxides
XPS comparative study of ceria/zirconia mixed oxides: powders and thin film characterisation 951
MLDAD
Magnetic dichroism in angle resolved photoemission of ferromagnetic nickel 191
Mn–Zn ferrite
MCD in 2*p* and 3*p* XAS of Mn–Zn ferrite 195
MnAs
Spin- and angle-resolved photoemission spectroscopy of ferromagnetic MnAs 207
Theoretical study on photoemission spectra of ferromagnetic manganese pnictides 357
MnSb
Surface preparation and spin-resolved photoemission of epitaxial MnSb(001) films on GaAs(111) 225
Theoretical study on photoemission spectra of ferromagnetic manganese pnictides 357
MnTe
Soft X-ray emission spectroscopy of NiAs-type MnTe at the Mn 2p core threshold 293

MO calculation
He I and He II photoelectron spectra of γ-thionobutyrolactones and γ-butyrolactones 91
He I and He II photoelectron spectra of thiophenones 97
Radiation damage of poly(methylmethacrylate) thin films analyzed by UPS 913
Modulated electron emission
Elastic and inelastic contributions to the angular intensity anisotropy of electron emission 741
Molecular beam epitaxy
Angle-resolved photoemission study of quantized electronic structures on Ag nanofilms 347
Molecular orbital
Two-photon photoemission from benzene adsorbed on Cu(111) 591
Molecular orbital calculation
Successive change in work function of Al exposed to air 767
Molecular orientation
Photoemission studies of functional organic materials and their interfaces 821
MoS_2
Penning ionization electron spectroscopy of titanyl phthalocyanine ultrathin films: electronic state and molecular orientation 885
Positron annihilation induced Auger electron spectroscopy with an intense slow-positron beam 677
Multi-charge
Multi-charged rare gas ions measured with a coincidence technique 65
Multiplet coupling
Calculation of electron-energy-loss spectra for 3s → 3d excitation in transition metal oxides 261

n-alkane
Angle-resolved UPS study and simulation with IAC approximation for oriented monolayer of tetratetracontane (*n*-$C_{44}H_{90}$) on Cu(100) 875
Nanostructure
One-dimensional band-like electronic states on Ni(755) surfaces studied by angle-resolved ultraviolet photoelectron spectroscopy using synchrotron radiation 707
NdB_6 (110)
Angle-resolved photoemission study of the surface electronic structure on NdB_6 (110) clean surface 637
NEXAFS
Surface analysis of CVD carbon using NEXAFS, XPS and TEM 919
Ni
Spin-resolved photoemission of ferromagnetic Ni valence band 163
Ni 2p excitation
Ni 2p excitation spectra of some planar Ni complexes 405
Ni(110)
Spin- and angle-resolved photoelectron spectroscopy from ferromagnetic Ni(110), Ni(110-p(2 × 1)O and Ni(110)-c(2 ×2)S 229
Ni(110)-c(2 × 2)S
Spin- and angle-resolved photoelectron spectroscopy from ferromagnetic Ni(110), Ni(110-p(2 × 1)O and Ni(110)-c(2 ×2)S 229
Ni(110)-p(2 × 1)O
Spin- and angle-resolved photoelectron spectroscopy from ferromagnetic Ni(110), Ni(110-p(2 × 1)O and Ni(110)-c(2 ×2)S 229
Nickel
Magnetic dichroism in angle resolved photoemission of ferromagnetic nickel 191
Nitric oxide
XAS and XPS studies on molecular and dissociative adsorption of nitric oxide on Rh 763
Nitrogen
Nitrogen adsorption on an W(100) surface studied by an analysis of electron energy-loss fine structure 571
Nitrogen molecule
Two-dimensional Penning ionization electron spectrum of N_2 by collision with He* (2^3S) metastable atoms 143High-resolution XAS spectrum of interstitial nitrogen molecules in the surface oxide matrix of TiAlN film 817
Nobel metal alloys
Resonant L_3–$M_{4,5}N_{4,5}$ Auger electron spectroscopy as a probe for the local electronic structure in Pd_xAg_{1-x} alloys 241
Non-dipole core excitation
Electron impact core excitation of molecules: non-dipole spectroscopy and generalized oscillator strengths 77

ODAD
Symmetry analysis of the Fermi surface of $Bi_2Sr_2CaCu_2O_8$ by display analyzer 489
One-dimensional cuprate
Angle-resolved photoemission spectroscopy of $SrCuO_2$: spin–charge separation? 461
One-dimensional electronic states
One-dimensional band-like electronic states on Ni(755) surfaces studied by angle-resolved ultraviolet photoelectron spectroscopy using synchrotron radiation 707

Optical potential
A self-consistent optical potential theory for atoms in solids 649
Optically forbidden excitation
Electron-energy-loss spectroscopy of cadmium fluoride 457
Organic conductor
X-Ray photoemission study of an organic quasi-1D DCNQI-Cu salt 939
Organic layer
On the impact of electron spectroscopies (versus optical techniques) to study organized organic layers and their interfaces 855
Organic semiconductor
Photoemission and inverse photoemission studies on a thin film of *N,N'*-dimethylperylene-3,4,9,10-bis(dicarboximide) 861
Organic thin film
High-resolution electron energy loss spectroscopy of chloroaluminium phthalocyanine ultrathin films 881
Penning ionization electron spectroscopy of titanyl phthalocyanine ultrathin films: electronic state and molecular orientation 885
Organo metallic compounds
Penning ionization of cobaltocene by collision with He*(2^2S) metastable atoms 149
Orientation
Angle-resolved UPS study and simulation with IAC approximation for oriented monolayer of tetra-tetracontane (n-$C_{44}H_{90}$) on Cu(100) 875
Orthoniobate lanthanoids
X-ray photoelectron spectroscopy study of indirect exchange interaction in orthoniobate lanthanoids $LnNbO_4$ 267
Oscillations
Application of the XPS method to the study of relaxation processes in transition metal melts 343
OTiPc
Penning ionization electron spectroscopy of titanyl phthalocyanine ultrathin films: electronic state and molecular orientation 885
Outer and inner valent molecular orbitals
The XPS spectra of cerium compounds containing oxygen 275
Oxidation
In situ observation of thermal and photon-induced reactions on Si surfaces by ultraviolet photoelectron spectroscopy 747
Oxygen
Electronic structure investigation of Ag(110)/1 × 2-O surface 717
O_2 adsorption on clean and K-modified ZrC(111) surfaces 801
Positron annihilation induced Auger electron spectroscopy with an intense slow-positron beam 677

PACS NUMBERS: 34.80Dp
Dichroism in (e,2e) ionizing collisions with laser-oriented sodium atoms 59
PAES
Positron annihilation induced Auger electron spectroscopy with an intense slow-positron beam 677
Partial ionization cross-section
Collision energy resolved Penning ionization electron spectra of polycyclic aromatic hydrocarbons 155
Two-dimensional Penning ionization electron spectrum of N_2 by collision with He* (2^3S) metastable atoms 143
Path integral
Theory of thermal factors in photoelectron diffraction for strongly anharmonic systems 523
Pb-based high T_c superconductor
XPS and XANES study on $Pb_2Sr_2YCu_3O_{8+\delta}$ and $PbBaSr(YCa)Cu_3O_{7+\delta}$ 503
PCF
Test solution of the idnverse problem for the determination of pair correlation function in the secondary electron extended fine structure technique 551
Pd(110)
Adsorption of π-bonded ethylene and ethynyl on Pd(110): an STM study 1003
Electronic structures in the valence region of chemisorbed and physisorbed species on Pd(110) 665
Pd(110)c(4 × 2)-benzene
Electronic structure near the fermi level and STM images of Pd(110)c(4 × 2)-benzene 997
Penning ionization
Penning ionization of cobaltocene by collision with He*(2^2S) metastable atoms 149
Penning ionization electron spectroscopy
Attempt to pile up extrathin sashlike macromolecules (atomic sashes) 867
Characterization of self-assembled monolayer of thiophenol on gold by Penning ionization electron spectroscopy 849
Penning ionization electron spectroscopy of atomic tape: an extrathin superstructure constructed by intra-monolayer hydrogen bonds on a solid surface 933
Penning ionization electron spectroscopy of titanyl phthalocyanine ultrathin films: electronic state and molecular orientation 885
Study of polycyclic aromatic hydrocarbons in the solid state by collision energy resolved Penning ionization electron spectroscopy 927

Two-dimensional Penning ionization electron spectrum of N_2 by collision with He* (2^3S) metastable atoms 143
Penning ionization electron spectrum
Collision energy resolved Penning ionization electron spectra of polycyclic aromatic hydrocarbons 155
Perylene
Study of polycyclic aromatic hydrocarbons in the solid state by collision energy resolved Penning ionization electron spectroscopy 927
PES
He I and He II photoelectron spectra of γ-thionobutyrolactones and γ-butyrolactones 91
He I and He II photoelectron spectra of thiophenones 97
Phase accumulation model
Angle-resolved photoemission study of quantized electronic structures on Ag nanofilms 347
Phase problem
Principles of crystallography using Bragg reflection from atomically localized sources 517
Phosphates
Electronic structures of phosphates studied by TEY-XANES and resonant AES 467
Phosphine
Electron emission from PH_2 produced via fast dissociation of core-excited PH_3 53
Phosphorus
Resonant Auger electron spectroscopy for analysis of the chemical state of phosphorus segregated at SiO_2/Si interfaces 603
Photo- and Auger electron diffraction
Design of an input lens system for a 180° deflection toroidal analyser using trajectory simulation 1021
Photoabsorption
Photoemission study of benzene adsorbed on Si surfaces 671
Photodissociation
Femtosecond photoelectron spectroscopy of the photodissociation of Au_3^- 35
Photoelectron diffraction
A self-consistent optical potential theory for atoms in solids 649
Anomalous diffraction effect on the surface core-level photoemission from Si(001) 2 × 1–Cs surface 539
Surface structure of thin CaO layers formed on CaF_2(111) studied by photoelectron diffraction 545
Theory of damping in forward scattering photoelectron diffraction due to thermal spherical wave effects 527
Photoelectron spectra
Experimental and theoretical investigation of aluminium, gallium and indium tris-acetylacetonates ground, excited and ionized states nature 103
The photoelectron spectroscopy and electronic structure of metal β-Diketonates and their analogs 109
Analysis of photoelectron spectra of high-temperature superconductors 479
Photoelectron spectroscopy
Apparatus for studying decay and dissociation of core excited molecules 1031
Femtosecond photoelectron spectroscopy of the photodissociation of Au_3^- 35
InP(100)-(2 × 4) surface electronic structure studied by angle-resolved photoelectron spectroscopy 609
One-dimensional band-like electronic states on Ni(755) surfaces studied by angle-resolved ultraviolet photoelectron spectroscopy using synchrotron radiation 707
Photoelectron spectroscopy studies of hollow lithium states 41
Satellites in core level XPS spectra of the Fe-based systems 339
Time-resolved core-level photoelectron spectroscopy on Sb-terminated GaAs(001) under Sb supply control at growth temperature 779
The electronic structure of U/Si(100), studied by X-ray photoelectron spectroscopy 631
X-ray photoelectron spectroscopy study of uranium compounds 353
Photoemission
Annealing temperature dependence on the electronic structure of the reduced $SrTiO_3$ (111) surface 695
Electronic structure investigation of Ag(110)/1 × 2-O surface 717
Fe 3p–3d Fano resonances in CdTe(111)/Fe and $Cd_{1-x}Fe_xTe$ 321
Fundamental processes of radiation damage of benzene solid studied by auger electron photoion coincidence spectroscopy 793
Photoemission and inverse photoemission studies on a thin film of *N,N'*-dimethylperylene-3,4,9,10-bis(dicarboximide) 861
Photoemission and inverse-photoemission study of ferromagnetic MnSb thin film grown by hot-wall epitaxy 365
Photoemission study of benzene adsorbed on Si surfaces 671
Resonant photoemission studies of thulium monochalcogenides around the Tm 3*d* threshold 377
Scattering states for very low energy electron spectroscopy 563
Simultaneous measurements of photoelectron and luminescence of barium halides 297

The dependence of dichroism in VUV-photoemission on the optical properties of adsorbates: Cs-monolayer on W(110) 185
Photoemission and inverse-photoemission spectroscopy
Photoemission and inverse-photoemission study of CeNiSn 411
Photoemission intensity
Anomalous diffraction effect on the surface core-level photoemission from Si(001) 2 × 1–Cs surface 539
Photoemission intensity calculation
Comparison between calculated and measured photoemission spectra of C_{60} thin films 891
Photoemission microscopy
Fast elemental mapping and magnetic imaging with high lateral resolution using a novel photoemission microscope 983
Photoemission spectra
Resonant photoemission study of rare earth 4f states in $Sn_{1-x}Gd_xTe$ 327
Photoemission spectroscopy
Photoemission and inverse-photoemission study of ferromagnetic valence fluctuating system CeF_2 303
Photofragmentation
Ionic fragmentation of inner-shell excited molecules 71
Photoionization
Ionic fragmentation of inner-shell excited molecules 71
Photon detection system
High-resolution photon detection system for inverse-photoemission spectroscopy 1027
Photon stimulated desorption
Photon stimulated ion desorption of condensed acetonitrile molecules induced by core excitation 831
Photon stimulated ion desorption of deuterated polystyrene thin films induced by core excitation 837
Photon-induced reactions
In situ observation of thermal and photon-induced reactions on Si surfaces by ultraviolet photoelectron spectroscopy 747
Physisorption
Electronic structures in the valence region of chemisorbed and physisorbed species on Pd(110) 665
Planar nickel complex
Ni 2*p* resonant photoelectron spectra of some planar nickel complexes 235
Platinum
Two-photon photoemission study of CO/Pt(111) 585
PMMA
Radiation damage of poly(methylmethacrylate) thin films analyzed by UPS 913
Polarization and emission
Spin polarized photoemission from amorphous alloy surfaces 171
Polarized X-ray absorption
Ni 2p excitation spectra of some planar Ni complexes 405
Polycrystal
Work function of polycrystalline Ag, Au and Al 643
Polycyclic aromatic hydrocarbon
Collision energy resolved Penning ionization electron spectra of polycyclic aromatic hydrocarbons 155
Study of polycyclic aromatic hydrocarbons in the solid state by collision energy resolved Penning ionization electron spectroscopy 927
Polyethylene
Surface characterization of polymer modified by He-ion bombardment 945
Polymer
On the impact of electron spectroscopies (versus optical techniques) to study organized organic layers and their interfaces 855
Polypropylene
Surface characterization of polymer modified by He-ion bombardment 945
Polystyrene
Photon stimulated ion desorption of deuterated polystyrene thin films induced by core excitation 837
Porous silicon
XPS, USXS and PLS investigations of porous silicon 969
Positron
Positron annihilation induced Auger electron spectroscopy with an intense slow-positron beam 677
Potassium doping
Ultraviolet photoelectron spectra of a higher fullerene C_{102} and its potassium complex 843
Preferred orientation
Work function of polycrystalline Ag, Au and Al 643
Prism
High-resolution photon detection system for inverse-photoemission spectroscopy 1027
PSD
Characterization of LiF and CaF_2 surfaces using MIES and UPS (HeI) 725
Pt thin films
X-Ray photoemission study of Pr/noble metals (Ag, Au) and Pr/transition metals (Ni, Pd) 625
Pt–Ge surface alloy
Electronic structure of a Pt(111)–Ge surface alloy and adsorbed CO 597
PTCDA
Photoemission and inverse photoemission studies

on a thin film of *N,N'*-dimethylperylene-3,4,9,10-bis(dicarboximide) 861
Pyrochlore
The peculiarities of the crystal and electronic structure of the zirconolite-type compounds $Ln_2Ti_2O_7$ (Ln = Rare Earth Elements) 385

Quantum chemistry
The photoelectron spectroscopy and electronic structure of metal β-Diketonates and their analogs 109
Quantum confinement effect
Angle-resolved photoemission study of quantized electronic structures on Ag nanofilms 347
Quantum-chemical calculations
Experimental and theoretical investigation of aluminium, gallium and indium tris-acetylacetonates ground, excited and ionized states nature 103
Quasi-1D system
X-Ray photoemission study of an organic quasi-1D DCNQI-Cu salt 939

Radial distribution functions
Application of the electron energy loss fine structure technique to the investigation of the Al–Ag binary system 557
Radiation damage
Radiation damage of poly(methylmethacrylate) thin films analyzed by UPS 913
Rare earth compounds
4*d* Core-level resonant photoemission spectroscopy of thulium monochalcogenides around the Tm 3*d* threshold 369
Rare earth elements
Resonant photoemission study of rare earth 4f states in $Sn_{1-x}Gd_xTe$ 327
Real time observation
Real time observation of coadsorption layers of acetylene/CO and acetylene/O on Ru(001) using a temperature-programmed ESDIAD/TOF system 773
Real-time analysis
Time-resolved core-level photoelectron spectroscopy on Sb-terminated GaAs(001) under Sb supply control at growth temperature 779
Regularization method
Application of the electron energy loss fine structure technique to the investigation of the Al–Ag binary system 557
Resonance
Magnetic dichroism in angle resolved photoemission of ferromagnetic nickel 191
Resonance phenomena
Tunable high-energy X-ray photoemission 683
Resonance photoemission
Electronic structures of $Nd_{1-x}Sr_xMnO_3$, $La_{1-x}Sr_xMnO_3$ and $La_{1-x}Ca_xMnO_3$ studied by photoemission and inverse photoemission spectroscopy 281
High resolution resonance photoemission, XPS and inverse photoemission spectroscopy of CePdX (X = As, Sb) 309
Resonance and high-resolution photoemission study of CoS_2 361
Two-dimensional angle-resolved resonance photoelectron spectroscopy of 1*T*-TaS_2 287
Resonant AES
Electronic structures of phosphates studied by TEY-XANES and resonant AES 467
Resonant Auger
Decay and dissociation dynamics of core-excited polyatomic molecules 1
Electron emission from PH_2 produced via fast dissociation of core-excited PH_3 53
Resonant Auger emission
X-Ray photoemission study of an organic quasi-1D DCNQI-Cu salt 939
Resonant photoemission
2p–3d resonant photoemission in Ti metal 399
4*d* Core-level resonant photoemission spectroscopy of thulium monochalcogenides around the Tm 3*d* threshold 369
Mn 2p–3d resonant photoemission spectroscopy of MnY (Y = S, Se, Te) 425
Ni 2*p* resonant photoelectron spectra of some planar nickel complexes 235
Spin-resolved photoemission of ferromagnetic Ni valence band 163
X-Ray photoemission study of an organic quasi-1D DCNQI-Cu salt 939
Resonant X-ray scattering
Dynamics and coherence of resonant X-ray Raman scattering 29
Rh
XAS and XPS studies on molecular and dissociative adsorption of nitric oxide on Rh 763
Ruthenium
Real time observation of coadsorption layers of acetylene/CO and acetylene/O on Ru(001) using a temperature-programmed ESDIAD/TOF system 773

S^{5+} ions
High resolution L Auger electron spectra from

fast projectile ions studied by zero-degree electron spectroscopy 83
Sashlike macromolecule
Attempt to pile up extrathin sashlike macromolecules (atomic sashes) 867
Satellite structure
Magnetic dichroism in angle resolved photoemission of ferromagnetic nickel 191
Sb
Time-resolved core-level photoelectron spectroscopy on Sb-terminated GaAs(001) under Sb supply control at growth temperature 779
Sc^{9+} ions
High resolution L Auger electron spectra from fast projectile ions studied by zero-degree electron spectroscopy 83
Scanning photoemission microscopy
Ag + Au bilayers on Si(111) studied with scanning photoemission microscopy 991
Scanning Tunneling Microscopy
High-resolution photoemission combined with low-temperature STM 1015
Scattering states
Scattering states for very low energy electron spectroscopy 563
SEFS
Test solution of the idnverse problem for the determination of pair correlation function in the secondary electron extended fine structure technique 551
Self-assembled monolayer
Characterization of self-assembled monolayer of thiophenol on gold by Penning ionization electron spectroscopy 849
Semimagnetic semiconductors
Fe 3p–3d Fano resonances in CdTe(111)/Fe and $Cd_{1-x}Fe_xTe$ 321
Resonant photoemission study of rare earth 4f states in $Sn_{1-x}Gd_xTe$ 327
Shake-up effect
Satellites in core level XPS spectra of the Fe-based systems 339
Shape resonances
Angular distributions of 1s photoelectrons from fixed-in-space molecules as a probe of shape resonances 9
Sheet-by-sheet superposition
Attempt to pile up extrathin sashlike macromolecules (atomic sashes) 867
Shifts of conduction band minima
X-ray photoemission and bremsstrahlung isochromat spectroscopy of bulk single crystalline Si_xGe_{1-x} alloys 395
Si
UPS study of electronic states of Ba on Si(001) surface 619
Si(001)
Dimer structure of clean Si(001) surface studied by grazing-incidence back-scattering MEED 533
Observation of circular dichroism in angular distribution of the valence band photoelectron from Si(001) in UPS region 213
Si(100)2 × 1
Photoemission study of benzene adsorbed on Si surfaces 671
Si(111)
Positron annihilation induced Auger electron spectroscopy with an intense slow-positron beam 677
Si(111)7 × 7
Photoemission study of benzene adsorbed on Si surfaces 671
Si(113)
Electronic structure of Si(113)2 × 2–Cs surface studied by ARUPS 701
Cesium core level binding energy shifts at the O_2/Cs/Si(113) surface 733
Si_xGe_{1-x} alloy
X-ray photoemission and bremsstrahlung isochromat spectroscopy of bulk single crystalline Si_xGe_{1-x} alloys 395
SiC
Electronic states and optical properties of β-SiC containing paired antisite defects 957
Silicide
UPS study of electronic states of Ba on Si(001) surface 619
USXES investigations of thin film $TiSi_2$ 963
Ag + Au bilayers on Si(111) studied with scanning photoemission microscopy 991
Silicon
In situ observation of thermal and photon-induced reactions on Si surfaces by ultraviolet photoelectron spectroscopy 747
SiC islands grown on Si(111)-(7 × 7) and Si(001)-(2 × 1) surfaces by C_{60} precursor 897
Surface core-level shifts of Si(111)7 × 7: a critical evaluation of the Si 2*p* analysis 711
Silicon carbide
SiC islands grown on Si(111)-(7 × 7) and Si(001)-(2 × 1) surfaces by C_{60} precursor 897
Silver
Electronic structure investigation of Ag(110)/1 × 2-O surface 717
Single crystal surface
Real time observation of coadsorption layers of

acetylene/CO and acetylene/O on Ru(001) using a temperature-programmed ESDIAD/TOF system 773
Single particle model
Analysis of temperature-dependent spin-resolved photoemission of Ni(110) by a single-particle model 201
Single-scattering approximation
Comparison between calculated and measured photoemission spectra of C_{60} thin films 891
SiO_2/Si interfaces
Resonant Auger electron spectroscopy for analysis of the chemical state of phosphorus segregated at SiO_2/Si interfaces 603
Sodium
Dichroism in (e,2e) ionizing collisions with laser-oriented sodium atoms 59
Soft X-ray emission spectroscopy
Soft X-ray emission spectroscopy of NiAs-type MnTe at the Mn 2p core threshold 293
Soft X-ray emission spectrum
Inverse photoemission and soft X-ray emission spectra of Al-Ni-Co decagonal single quasicrystal 415
Soft X-ray synchrotron radiation
Vibrational fine structure on the core level photoelectron lines of small polyatomic molecules 19
Spectromicroscopy
Fast elemental mapping and magnetic imaging with high lateral resolution using a novel photoemission microscope 983
Spherical mirror
Multi-charged rare gas ions measured with a coincidence technique 65
Spherical shell
Comparison between calculated and measured photoemission spectra of C_{60} thin films 891
Spherical wave effects
Theory of damping in forward scattering photoelectron diffraction due to thermal spherical wave effects 527
Spin polarized photoemission
Spin polarized photoemission from amorphous alloy surfaces 171
Spin- and angle-resolved photo-electron spectroscopy
Spin- and angle-resolved photoelectron spectroscopy from ferromagnetic Ni(110), Ni(110-p(2 × 1)O and Ni(110)-c(2 ×2)S 229
Spin–charge separation
Angle-resolved photoemission spectroscopy of $SrCuO_2$: spin–charge separation? 461
Spin-resolved photoemission
Analysis of temperature-dependent spin-resolved photoemission of Ni(110) by a single-particle model 201
Spin-resolved photoemission of ferromagnetic Ni valence band 163
Surface preparation and spin-resolved photoemission of epitaxial MnSb(001) films on GaAs(111) 225
Spin-resolved photoemission spectroscopy
Spin- and angle-resolved photoemission spectroscopy of ferromagnetic MnAs 207
$SrCuO_2$
Angle-resolved photoemission spectroscopy of $SrCuO_2$: spin–charge separation? 461
$SrTiO_3$ (111)
Annealing temperature dependence on the electronic structure of the reduced $SrTiO_3$ (111) surface 695
Stacking fault
Work function of polycrystalline Ag, Au and Al 643
Step
One-dimensional band-like electronic states on Ni(755) surfaces studied by angle-resolved ultraviolet photoelectron spectroscopy using synchrotron radiation 707
STM
Adsorption of π-bonded ethylene and ethynyl on Pd(110): an STM study 1003
Structural phase transition
Correlated electronic states of Yb_4As_3 studied with photoemission 315
Structure
On the impact of electron spectroscopies (versus optical techniques) to study organized organic layers and their interfaces 855
Superconductivity
X-ray photoelectron study of the electronic structure of Y–Ba–Cu–O HTSC thin films in dependence on their composition and temperature 485
Superconductor
Fermi surface of Sr_2RuO_4 studied by two-dimensional angle resolved photoelectron spectroscopy 473
Superexchange interaction
Large-cluster effects on core-level photoemission spectra of quasi-one-dimensional copper compounds 255
Surface
Observation of the surface states on CuCl(100) 689
Successive change in work function of Al exposed to air 767
Surface analysis of CVD carbon using NEXAFS, XPS and TEM 919
Surface analysis
Surface analysis of Si/W multilayer using total reflection X-ray photoelectron spectroscopy 787

Surface band dispersion
Electronic structure of Si(113)2 × 2–Cs surface studied by ARUPS 701
Surface core-level shifts
Anomalous diffraction effect on the surface core-level photoemission from Si(001) 2 × 1–Cs surface 539
Surface effect
Photoemission and inverse-photoemission study of CeNiSn 411
Photoemission and inverse-photoemission study of ferromagnetic valence fluctuating system CeF_2 303
Surface electronic phenomena
Two-photon photoemission from benzene adsorbed on Cu(111) 591
Surface electronic structure
Surface electronic structure of InAs(100)1*x*2/1*x*4-Pb 613
Surface influence
Analysis of photoelectron spectra of high-temperature superconductors 479
Surface modification
Surface characterization of polymer modified by He-ion bombardment 945
Surface oxidation
Surface structure of thin CaO layers formed on CaF_2(111) studied by photoelectron diffraction 545
Surface phonon
SiC islands grown on Si(111)-(7 × 7) and Si(001)-(2 × 1) surfaces by C_{60} precursor 897
Surface reconstruction
Electronic structure of Si(113)2 × 2–Cs surface studied by ARUPS 701
Surface core-level shifts of Si(111)7 × 7: a critical evaluation of the Si 2*p* analysis 711
Surface science
Spin-dependent electron dynamics investigated by means of time- and spin-resolved photoemission 179
Surface self-assembly
Penning ionization electron spectroscopy of atomic tape: an extrathin superstructure constructed by intra-monolayer hydrogen bonds on a solid surface 933
Surface state
Angle-resolved photoemission study of the surface electronic structure on NdB_6 (110) clean surface 637
Surface structure
Surface structure of thin CaO layers formed on CaF_2(111) studied by photoelectron diffraction 545
Surface topochemical reaction
Attempt to pile up extrathin sashlike macromolecules (atomic sashes) 867
Symmetry
Symmetry analysis of the Fermi surface of $Bi_2Sr_2CaCu_2O_8$ by display analyzer 489
Synchrotron radiation
Circular dichroism in the angular distribution of core-level photoelectrons from GaAs (111) 219
Ionic fragmentation of inner-shell excited molecules 71
Observation of the surface states on CuCl(100) 689
Synchrotron radiation spectromicroscopy
Ag + Au bilayers on Si(111) studied with scanning photoemission microscopy 991

TEM
Surface analysis of CVD carbon using NEXAFS, XPS and TEM 919
Ternary transitions metal compounds
Electronic structure of ternary transition metal oxides and sulphides: X-ray photoelectron and X-ray emission spectroscopy study 441
Tetravalent Pr
X-Ray photoemission study of Pr/noble metals (Ag, Au) and Pr/transition metals (Ni, Pd) 625
Thermal desorption spectroscopy
Nitrogen adsorption on an W(100) surface studied by an analysis of electron energy-loss fine structure 571
Thermal effects
Theory of damping in forward scattering photoelectron diffraction due to thermal spherical wave effects 527
Thin film
Observation of the surface states on CuCl(100) 689
Photoemission and inverse photoemission studies on a thin film of *N,N'*-dimethylperylene-3,4,9,10-bis(dicarboximide) 861
Photon stimulated ion desorption of deuterated polystyrene thin films induced by core excitation 837
The electronic structure of U/Si(100), studied by X-ray photoelectron spectroscopy 631
Thin film thickness
The influence of the photoelectron elastic scattering on the photoelectron diffraction patterns, in-depth profiling and thin film thickness determination 509
Thin films
Surface structure of thin CaO layers formed on CaF_2(111) studied by photoelectron diffraction 545
XPS comparative study of ceria/zirconia mixed oxides: powders and thin film characterisation 951
X-ray photoelectron study of the electronic structure of Y–Ba–Cu–O HTSC thin films in dependence on their composition and temperature 485
Thionobutyrolactones
He I and He II photoelectron spectra of γ-thionobutyrolactones and γ-butyrolactones 91

Thiophenol
Characterization of self-assembled monolayer of thiophenol on gold by Penning ionization electron spectroscopy 849
Thiophenones
He I and He II photoelectron spectra of thiophenones 97
Three-way catalysts
XPS comparative study of ceria/zirconia mixed oxides: powders and thin film characterisation 951
Threshold processes
Tunable high-energy X-ray photoemission 683
Thulium compounds
Resonant photoemission studies of thulium monochalcogenides around the Tm 3*d* threshold 377
Ti
2p–3d resonant photoemission in Ti metal 399
TiAlN
High-resolution XAS spectrum of interstitial nitrogen molecules in the surface oxide matrix of TiAlN film 817
TiC
Adsorption of methanol on TiC(100) and (111) surfaces 805
Time-of-flight
Photon stimulated ion desorption of deuterated polystyrene thin films induced by core excitation 837
Time-resolved
Time-resolved core-level photoelectron spectroscopy on Sb-terminated GaAs(001) under Sb supply control at growth temperature 779
Time-resolved photoelectron spectroscopy
Temperature dependence of surface state lifetimes, dephasing rates and binding energies on Cu(111) studied with time-resolved photoemission 577
Time-resolved photoemission
Energy relaxation and dephasing times of excited electrons in $Bi_2Sr_2CaCu_2O_{8+\delta}$ from interferometric 2-photon time-resolved photoemission 495
Toluene
Observation of van der Waals vibrations in zero kinetic energy (ZEKE) photoelectron spectra of toluene–Ar van der Waals complex 125
Toluene–Ar van der Waals complex
Observation of van der Waals vibrations in zero kinetic energy (ZEKE) photoelectron spectra of toluene–Ar van der Waals complex 125
Total reflection X-rays
Surface analysis of Si/W multilayer using total reflection X-ray photoelectron spectroscopy 787
Trajectory simulation
Design of an input lens system for a 180° deflection toroidal analyser using trajectory simulation 1021
Transition metal oxides
Calculation of electron-energy-loss spectra for 3s → 3d excitation in transition metal oxides 261
Triethylene glycol dimatacrylate (TGM-3)
X-ray photoelectron spectroscopic investigation of metallorganic complexes 977
Tungsten (100) surface
Nitrogen adsorption on an W(100) surface studied by an analysis of electron energy-loss fine structure 571
Two-dimensional measurement
Observation of circular dichroism in angular distribution of the valence band photoelectron from Si(001) in UPS region 213
Two-photon photoelectron spectroscopy
Two-photon photoemission study of CO/Pt(111) 585
Two-photon photoemission
Two-photon photoemission from benzene adsorbed on Cu(111) 591

Ultrafast electron dynamics
Temperature dependence of surface state lifetimes, dephasing rates and binding energies on Cu(111) studied with time-resolved photoemission 577
Ultrafast spectroscopy
Spin-dependent electron dynamics investigated by means of time- and spin-resolved photoemission 179
Ultrasoft X-ray spectra
USXES investigations of thin film $TiSi_2$ 963
Ultraviolet photoelectron spectra
Ultraviolet photoelectron spectra of a higher fullerene C_{102} and its potassium complex 843
Ultraviolet photoelectron spectroscopy
Adsorption of methanol on TiC(100) and (111) surfaces 805
Characterization of self-assembled monolayer of thiophenol on gold by Penning ionization electron spectroscopy 849
In situ observation of thermal and photon-induced reactions on Si surfaces by ultraviolet photoelectron spectroscopy 747
Ultraviolet photoelectron spectroscopy of poly(anthraquinone)s and poly(1,10-phenanthroline-3,8-diyl); their electronic structure and K-doped states 905
Ultraviolet photoelectron spectrum
Collision energy resolved Penning ionization electron spectra of polycyclic aromatic hydrocarbons 155
Ultraviolet photoemission spectroscopy
O_2 adsorption on clean and K-modified ZrC(111) surfaces 801

Unoccupied states
Electronic structures of phosphates studied by TEY-XANES and resonant AES 467
UPS
Characterization of LiF and CaF_2 surfaces using MIES and UPS (HeI) 725
Circular dichroism in the angular distribution of core-level photoelectrons from GaAs (111) 219
Interaction of small molecules with Mg and MgO surfaces studied with MIES and UPS(HeI) 757
Radiation damage of poly(methylmethacrylate) thin films analyzed by UPS 913
UPS study of electronic states of Ba on Si(001) surface 619
Uranium
The electronic structure of U/Si(100), studied by X-ray photoelectron spectroscopy 631
Uranium compound
X-ray photoelectron spectroscopy study of uranium compounds 353

Valence band
InP(100)-(2 × 4) surface electronic structure studied by angle-resolved photoelectron spectroscopy 609
Observation of circular dichroism in angular distribution of the valence band photoelectron from Si(001) in UPS region 213
XPS study of electronic structure change of the Fe–Cr system at temperatures below the brittleness threshold 449
XPS study of transition metal electronic structure in crystalline and liquid states 453
Valence fluctuation
Photoemission and inverse-photoemission study of ferromagnetic valence fluctuating system CeF_2 303
Van der Waals complex
Zero kinetic energy (ZEKE) photoelectron study of the benzene–N_2 and fluorobenzene–N_2 van der Waals complexes 131
Vapor-deposited monolayer
Penning ionization electron spectroscopy of atomic tape: an extrathin superstructure constructed by intra-monolayer hydrogen bonds on a solid surface 933
Vibronic coupling
Vibrational fine structure on the core level photoelectron lines of small polyatomic molecules 19
VLEED
Scattering states for very low energy electron spectroscopy 563

Work function
Work function of polycrystalline Ag, Au and Al 643
Successive change in work function of Al exposed to air 767

X-ray absorption near-edge structure
XPS and XANES study on $Pb_2Sr_2YCu_3O_{8+\delta}$ and $PbBaSr(YCa)Cu_3O_{7+\delta}$ 503
X-ray absorption spectroscopy
Photoemission and inverse-photoemission study of CeNiSn 411
X-ray emission spectra
Electronic structure of ternary transition metal oxides and sulphides: X-ray photoelectron and X-ray emission spectroscopy study 441
X-ray multilayer optics
Surface analysis of Si/W multilayer using total reflection X-ray photoelectron spectroscopy 787
X-ray photoelectron diffraction
Principles of crystallography using Bragg reflection from atomically localized sources 517
Theory of thermal factors in photoelectron diffraction for strongly anharmonic systems 523
X-ray photoelectron spectra
Electronic structure of ternary transition metal oxides and sulphides: X-ray photoelectron and X-ray emission spectroscopy study 441
The XPS spectra of cerium compounds containing oxygen 275
XPS study of electronic structure change of the Fe–Cr system at temperatures below the brittleness threshold 449
XPS, USXS and PLS investigations of porous silicon 969
X-ray photoelectron spectroscope
X-ray photoelectron study of the electronic structure of Y–Ba–Cu–O HTSC thin films in dependence on their composition and temperature 485
X-Ray photoelectron spectroscopy
Surface characterization of polymer modified by He-ion bombardment 945
X-ray photoelectron spectroscopic investigation of metallorganic complexes 977
X-ray photoelectron spectroscopy study of indirect exchange interaction in orthoniobate lanthanoids $LnNbO_4$ 267
XPS and XANES study on $Pb_2Sr_2YCu_3O_{8+\delta}$ and $PbBaSr(YCa)Cu_3O_{7+\delta}$ 503
X-ray photoemission spectroscopy
X-ray photoemission and bremsstrahlung isochromat spectroscopy of bulk single crystalline Si_xGe_{1-x} alloys 395
X-Ray photoemission study of Pr/noble metals (Ag, Au) and Pr/transition metals (Ni, Pd) 625

X-ray spectra
XPS, USXS and PLS investigations of porous silicon 969
XAFS
A self-consistent optical potential theory for atoms in solids 649
XANES
Electronic structures of phosphates studied by TEY-XANES and resonant AES 467
XAS
High-resolution XAS spectrum of interstitial nitrogen molecules in the surface oxide matrix of TiAlN film 817
XAS and XPS studies on molecular and dissociative adsorption of nitric oxide on Rh 763
XPS
Electronic structure investigation of Ag(110)/1 × 2-O surface 717
High resolution resonance photoemission, XPS and inverse photoemission spectroscopy of CePdX (X = As, Sb) 309
High-resolution XAS spectrum of interstitial nitrogen molecules in the surface oxide matrix of TiAlN film 817
On the impact of electron spectroscopies (versus optical techniques) to study organized organic layers and their interfaces 855
Surface analysis of CVD carbon using NEXAFS, XPS and TEM 919
XAS and XPS studies on molecular and dissociative adsorption of nitric oxide on Rh 763
XPS shifts
Energy shifts and electronic structure changes in alloys: an unfulfilled promise? 435
Xylene
Electron impact core excitation of molecules: non-dipole spectroscopy and generalized oscillator strengths 77

Yield spectrum
Effects of Coster–Kronig decay on Ce 3*d*-4*f* resonant photoemission spectra of $CeOs_2$ 419

ZEKE photoelectron spectra
Observation of van der Waals vibrations in zero kinetic energy (ZEKE) photoelectron spectra of toluene–Ar van der Waals complex 125
ZEKE photoelectron spectroscopy and ab initio force-field calculation of 1,2,4,5-tetrafluorobenzene 137
Zero kinetic energy (ZEKE) photoelectron study of the benzene–N_2 and fluorobenzene–N_2 van der Waals complexes 131
Zero-degree electron spectra
Electron spectra from fast projectile Si and S ions studied by zero-degree electron spectroscopy 87
High resolution L Auger electron spectra from fast projectile ions studied by zero-degree electron spectroscopy 83
Zirconia
XPS comparative study of ceria/zirconia mixed oxides: powders and thin film characterisation 951
Zn-bis-β-diketonates
Electronic structure of some bis-β-diketonates of zinc and their thio-analogs 119
ZrC
O_2 adsorption on clean and K-modified ZrC(111) surfaces 801